

TPC-318WH

18.5" WXGA TFT LED LCD Touch Panel Computer with 8th Gen. Intel® Core™ i5 Processor, built-in 8G DDR4 RAM, 240G SSD and UL Class 1 Division 2



Features

- Industrial-grade 18.5" WXGA TFT LCD with 50K lifetime and LED backlight
- 8th Gen. Intel® Core™ i5-8365UE quad-core processor with built-in 8 GB DDR4 SO-DIMM/8th Gen. Intel® Core™ i7-8665UE 1.70 GHz Quad-core processor (Optional)
- Dual channel memory slots support up to 64G in total
- Compact, fanless embedded system with aluminum alloy front bezel and chassis grounding protection
- True-flat touchscreen with PCAP touch control and IP66-rated front panel
- Diverse system I/O and isolated digital I/O via iDoor technology
- Support TPM2.0 hardware security

Introduction

TPC-318WH touch panel computer is a C1D2 certification model equipped with 18.5" WXGA TFT LED LCD, low-power 8th Gen. Intel® Core™ i5-8365UE quad-core processor, and built-in 8 GB DDR4 SO-DIMM delivering high performance yet compact and fanless computing system. To provide enhanced durability and satisfy diverse applications of industrial automation, TPC-318WH features IP66-rated front panel protecting against dust and water ingress, and two extra expansion M.2 M Key, B Key slots supporting NVMe, SATA or 5G application. Moreover, TPC-318WH has been C1D2 certified for the application in hazardous environments.

Specifications

General

- **BIOS** AMI UEFI
- **Certification** BSMI, CCC, CE, FCC Class A, CB/UL C1D2
- **Cooling System** Fanless design
- **Dimensions (W x H x D)** 477.72 x 298.72 x 70 mm (18.81 x 13.52 x 2.68 in)
- **Enclosure** Front bezel: Die cast aluminum alloy
Back housing: Die cast aluminum alloy
- **Mounting** VESA Mount, Desktop, Wall or Panel Mount
- **OS Support** Win 10, Linux
- **Security** TPM 2.0 (built-in)
- **Power Consumption** 45.48W (Typical)
- **Power Input** 24 V_{DC} ± 20%
- **Watchdog Timer** 15-255 sec (system)
- **Weight (Net)** 6.3kg (13.89lbs)

System Hardware

- **CPU** 8th Gen. Intel® Core™ i5-8365UE 1.60 GHz Quad-core processor/8th Gen. Intel® Core™ i7-8665UE 1.70 GHz Quad-core processor (Optional)
- **Memory** Dual channel DDR4 SO-DIMM (Each channel supports up to 32G)
- **Storage** 1 x 2.5" SSD 240G(480G Option)
1 x 8G DDR4 SO-DIMM (Built-in)
- **LAN** 2 x 10/100/1000BASE-T
- **Expansion Slot** 1 x Full-size mini PCIe*
1 x SIM (M.2 B Key 4G/5G module)*
- **Storage Slot** 1 x M.2 M key 2280 (SATA or NVMe PCIe x4)
1 x M.2 B key 2242 (SATA / PCIe)
1 x 2.5" SSD/HDD (SATA, Max. 7mm)
- **I/O** 2 x RS-232/422/485
1 x USB 2.0
4 x USB 3.2 (Gen 2)
1 x iDoor slot
1 x Displayport (Video output)
1 x Audio line out/ mic in

LCD Display

- **Display Type** WXGA TFT LED LCD
- **Display Size** 18.5"
- **Max. Resolution** 1366 x 768
- **Max Colour** 16.7M
- **Luminance cd/m²** 450 cd/m²
- **Viewing Angle (H/V°)** 170°/160°
- **Backlight Life** 50,000 hrs
- **Contrast Ratio** 1000:1

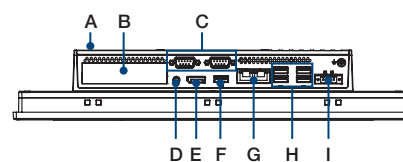
Touchscreen

- **Lifespan** 36 million touches at a single point
- **Light Transmission** Above 75%
- **Resolution** Linearity
- **Type** PCAP touch screen

Environment

- **Humidity** 95% RH @ 40°C, non-condensing
- **Ingress Protection** IP66-rated front panel
- **Operating Temperature** -10~55°C (14~131°F) (w/o air flow)
- **Storage Temperature** -20~70°C (-4~158°F)
- **Vibration Protection** With SSD: 1 Grms (5 ~ 500 Hz) (Operating, random vibration)

Rear View

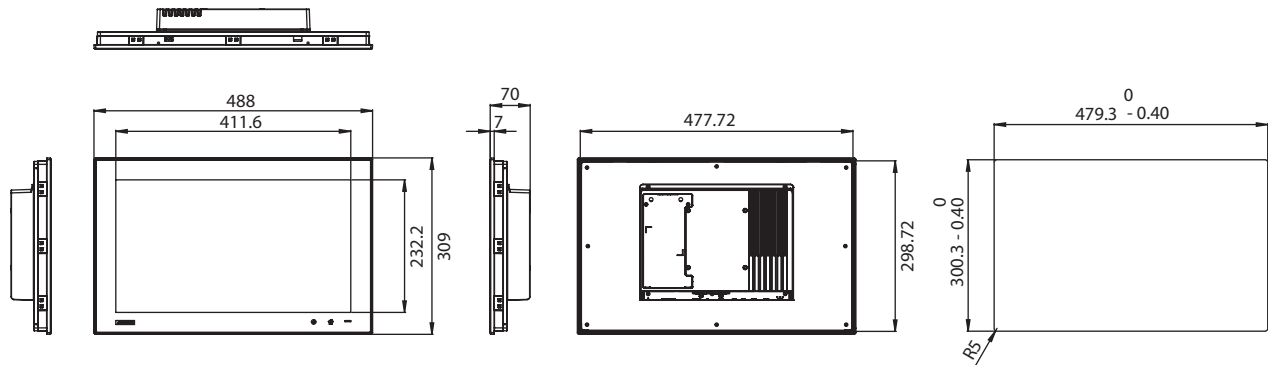


- A. Default HDD/SSD Bay
- B. iDoor slot
- C. RS-232/422/485
- D. Audio line out/ mic in
- E. Display Port
- F. USB 2.0
- G. LAN (10/100/1000)
- H. USB 3.2 (Gen 2)
- I. Power Receptor

* C1D2 report doesn't cover expansion slot features.

Dimensions

Unit: mm



TPC-318WH Panel Cutout Dimensions: 479.3 x 300.3 mm (18.87 x 11.82 in)

Ordering Information

- **TPC-318WH-P853A** 18.5" WXGA Panel PC, C1D2 certification, Intel® Core™ i5 8365UE 1.6GHz Quad-core processor, 8G DDR4 RAM, 240G SSD
- **TPC318WHP8532301-T** 18.5" WXGA Panel PC, C1D2 certification, Intel® Core™ i7 8665UE 1.7GHz Quad-core processor, 16G DDR4 RAM, 480G SSD

Optional Accessories

- **96PSA-A120W24T2-4** 120W 24V_{DC} power supply
- **1702002600** Power cable (US) 1.8 M
- **1702002605** Power cable (EU) 1.8 M
- **1702031801** Power cable (UK) 1.8 M
- **1700000596-11** Power cable (China/Australia) 1.8 M

Embedded OS

- **20704WX1HS0006** Img WIN10 LTSC V6.08 B018 TPC-300 High
- **20704WX1VS0006** Img WIN10 LTSC V6.08 B018 TPC-300 Value

Packing List

Item	Part No.	Depiction	Qty
Grounding cable	1703011001-11	A Cable G-TEM 4.3 100CM C=GR/Y	1
Plug-In Block	1652007930-01	Plug-In Block 1x3P/5.08mm/PA66/F/VA	1
Warranty	2190000902	CARDBOARD-WARRANTY REV. A2	1
VESA Screw	1930005204	Screw M4x10L R/S DH=6.8x2.50 + ST ZBK PL	4
HDD Screw	1930001361	Screw M3x4L S/S D=5 H=1.2 (2+) ST Ni NK	4
M.2 Screw	19350304A0	Screw M3x4L R/S D=5.3 H=2 (2+) ST Ni NK	1
DRAM Thermal Pad	1990020119N001	Thermal Pad 59x24.2x3.0mm XR-HL K=1.2 TP Sarcon	1
Clamp	1960018986T000	Clamper-bezel M5 for TPC-1770 A1	12
Clamp Screw	1935052000	Screw M5x20L R/S D=9 H=3 (2+) ST Ni	12

Expansion Components on TPC-318WH C1D2 Certification		Description
RAM1 (Pre-Build)	AQD-SD4U8GN32-SE	8GB DDR4 SODIMM-3200 1GbX8 SAM 0-85C
RAM2	AQD-SD4U8GN32-SE	8GB DDR4 SODIMM-3200 1GbX8 SAM 0-85C
HDD / 2.5" SSD (Pre-Build)	SQF-S25V4-240GDSCE	SQF 2.5" SSD 840-D 240G 3D BiCS5 (-40-85°C)
Option1	SQF-S25V4-480GDSCE	SQF 2.5" SSD 840-D 480G 3D BiCS5 (-40-85°C)
Option2	SQF-S25V4-960GDSCE	SQF 2.5" SSD 840-D 960G 3D BiCS5 (-40-85°C)
Wifi (Pre-Build)	None	
Option1	EWM-W192M201E	Intel Wireless-AC 9260, 2230,2x2 AC+BT,No vPro
Option2	EWM-W192M202E	Intel Wireless-AC9260,2230,2x2AC+BT,vPro version
Option3	EWM-W192M205E	Intel AC9260 M.2 2230 E-key i-temp module
M.2 (Pre-Build)	None	
Option1	SQF-CM8V4-240G-ECE	SQF M.2 2280 920 240G 3D TLC BiCS3 (-40-85°C)

Please note: If some optional modules are offered with the system, additional Like C1D2 may be required in certain regions/countries. Please contact Advantech for certificate compliance.